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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2015/2016

BFN2094 – CORPORATE RISK MANAGEMENT

(All sections / Groups)

31st MAY 2016
2.30 p.m.- 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Questions paper consists of 2 pages with 4 Questions only.
2. Attempt **ALL** questions.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

Below are the loss distributions for Jack and Jill.

	Probability of Loss Outcomes	Jack	Jill
Loss Outcome #1	0.15	RM1,500	RM1,000
Loss Outcome #2	0.85	RM0	RM100

- (a) What is Jack's expected loss and standard deviation of expected loss? (7 marks)
- (b) What is Jill's expected loss and standard deviation of expected loss? (7 marks)

Jack's and Jill's outcomes are independent of one another, so they decide to form a risk pool and share the losses equally. Construct a table displaying the Jack's portion of the possible outcomes and the probabilities of the sharing arrangement.

(16 marks)

- (c) What is the expected loss and standard deviation of expected loss for Jack's outcome from the sharing arrangement? (10 marks)

(Total: 40 marks)

QUESTION 2

Betty Smiley and Gary Happy have the following expected claims distributions:

	Loss (RM)	Probability of Loss
Betty Smiley	10,000	0.10
	5,000	0.20
	1,000	0.30
	0	0.40
Gary Happy	10,000	0.05
	5,000	0.10
	1,000	0.15
	0	0.70

Continued...

- (a) What are the expected claims costs for Betty Smiley and Gary Happy respectively?
(8 marks)
- (b) What is the expected average claims cost per policy for a pool in which 50% of the participants have claims distributions identical to Betty Smiley and 50% have claims distributions identical to Gary Happy.
(3 marks)
- (c) If insurers cannot distinguish Gary Happy from Betty Smiley, what is the potential problem with charging everyone a premium equal to the expected average claims costs?
(4 marks)
- (Total: 15 marks)

QUESTION 3

Below is the loss control expenditures distributions.

Loss Control Expenditures (RM)	Number of Worker Injuries	Average Injury Severity (RM)
0	200	8,000
50,000	170	
100,000	148	
150,000	130	
200,000	122	
250,000	118	

- Determine what level of loss control spending should be undertaken? (20 marks)
- (Total: 20 marks)

QUESTION 4

- a) Briefly discuss **FIVE (5)** factors affecting the demand for insurance. (20 marks)
- b) Skewness measures what characteristic of a loss distribution? Why are skewed distributions relevant to risk managers?
(5 marks)
- (Total: 25 marks)

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